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(54) **METHOD FOR GROWING III-V EPITAXIAL LAYERS AND SEMICONDUCTOR STRUCTURE**

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(57) **ABSTRACT**

Disclosed are methods of growing III-V epitaxial layers on a substrate, a semiconductor structure comprising a substrate, a device comprising such a semiconductor structure, and an electronic circuit. Group III-nitride devices, such as, for example, high-electron-mobility transistors, may include a two-dimensional electron gas (2DEG) between two active layers. For example, the 2DEG may be between a GaN layer and a AlGaN layer. These transistors may work in depletion-mode operation, which means the channel has to be depleted to turn the transistor off. For certain applications, such as, for

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regrowth of p-(Al)GaN

